AMENDMENT

IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application. Where claims have been amended and/or canceled, such amendments and/or cancellations are done without prejudice and/or waiver and/or disclaimer, and Assignee reserves the right to claim this subject matter in a continuing application:

1. – 16. (Cancelled)

17. (Previously Presented) The method of Claim 21, wherein the first length and the second length are different.

18. (Original) The method of Claim 17, wherein the first payload and the second payload are different.

19. (Original) The method of Claim 18, further comprising counting the number of packets transmitted by the test packet generator.

20. (Previously Presented) The method of Claim 21, wherein transmitting from the test packet generator comprises communicating data onto a parallel bus.

21. (Currently Amended) A method for testing network communication equipment with a test packet generator, comprising:

[[a)]] transmitting, from the test packet generator, a synchronization packet;

[[b)]] generating a first data packet including a first header and a first payload;

[[c)]] transmitting, from the test packet generator, the first data packet;

[[d)]] providing a first inter-packet gap of a first length;

[[e)]] generating a second data packet including a second header and a second payload;

[[f)]] transmitting, from the test packet generator, the second data packet;

[[g)]] providing a second inter-packet gap of a second length;

[[h)]] optionally repeating ~~steps (b) through (g)~~ said generating a first data packet, said transmitting, from the test packet generator, the first data packet, said providing a first inter-packet gap, said generating a second data packet, said transmitting, from the test packet generator, the second data packet and said providing a second inter-packet gap at least once;

wherein the first header is different from the second header;

wherein the method further comprises counting a number of packets transmitted, receiving the packets, counting the received packets, and counting the received packets with errors;

wherein the first and second inter-packet gaps comprise integer multiples of 8 bytes, the first header and second header are each 20 bytes longs, and the first and second headers contain different data, and wherein the size of the first packet is representative of a control packet on an Internet backbone, and the size of the second packet is representative of a data packet on the Internet backbone.

22. (Previously Presented) The method of Claim 21, further comprising programming content of the first packet header and the second packet header by executing software to write to at least two sets of packet header registers.

23. (Previously Presented) The method of Claim 22, further comprising programming the content of the first payload and the second payload by executing software to set one or more bits in at least two payload pattern registers.

24. (Previously Presented) The method of Claim 23, further comprising determining the size of the first packet and the second packet by executing software to write packet size control information into at least two packet size control registers.

25. -51. (Cancelled)

52. (New) An apparatus, comprising:

means for transmitting, from a test packet generator, a synchronization packet;

means for generating a first data packet including a first header and a first payload;

means for transmitting, from the test packet generator, the first data packet;

means for providing a first inter-packet gap of a first length;

means for generating a second data packet including a second header and a second payload;

means for transmitting, from the test packet generator, the second data packet;

means for providing a second inter-packet gap of a second length;

means for optionally repeating said means for generating a first data packet, said means for transmitting, from the test packet generator, the first data packet, said means for providing a first inter-packet gap, said means for generating a second data packet, said means for transmitting, from the test packet generator, the second data packet and said means for providing a second inter-packet gap at least once;

wherein the first header is different from the second header;

wherein the apparatus further comprises means for counting a number of packets transmitted, means for receiving the packets, means for counting the received packets, and means for counting the received packets with errors;

wherein the first and second inter-packet gaps comprise integer multiples of 8 bytes, the first header and second header are each 20 bytes longs, and the first and second headers contain different data, and wherein the size of the first packet is representative of a control packet on an Internet backbone, and the size of the second packet is representative of a data packet on the Internet backbone.

53. (New) The apparatus of Claim 52, wherein the first length and the second length are different.

54. (New) The apparatus of Claim 53, wherein the first payload and the second payload are different.

55. (New) The apparatus of Claim 54, further comprising means for counting the number of packets transmitted by the test packet generator.

56. (New) The apparatus of Claim 52, wherein means for transmitting from the test packet generator comprises means for communicating data onto a parallel bus.

57. (New) The apparatus of Claim 52, further comprising means for programming content of the first packet header and the second packet header by executing software to write to at least two sets of packet header registers.

58. (New) The apparatus of Claim 57, further comprising means for programming the content of the first payload and the second payload by executing software to set one or more bits in at least two payload pattern registers.

59. (New) The apparatus of Claim 58, further comprising means for determining the size of the first packet and the second packet by executing software to write packet size control information into at least two packet size control registers.

60. (New) An article comprising: a storage medium having stored thereon instructions that, if executed, results in testing network communication equipment with a test packet generator by:

transmitting, from the test packet generator, a synchronization packet;

generating a first data packet including a first header and a first payload;

transmitting, from the test packet generator, the first data packet;

providing a first inter-packet gap of a first length;

generating a second data packet including a second header and a second payload;

transmitting, from the test packet generator, the second data packet;

providing a second inter-packet gap of a second length;

optionally repeating said generating a first data packet, said transmitting, from the test packet generator, the first data packet, said providing a first inter-packet gap, said generating a second data packet, said transmitting, from the test packet generator, the second data packet and said providing a second inter-packet gap at least once;

wherein the first header is different from the second header;

wherein the instructions, if executed, further result in counting a number of packets transmitted, receiving the packets, counting the received packets, and counting the received packets with errors;

wherein the first and second inter-packet gaps comprise integer multiples of 8 bytes, the first header and second header are each 20 bytes longs, and the first and second headers contain different data, and wherein the size of the first packet is representative of a control packet on an Internet backbone, and the size of the second packet is representative of a data packet on the Internet backbone.

61. (New) The article of Claim 60, wherein the first length and the second length are different.

62. (New) The article of Claim 61, wherein the first payload and the second payload are different.

63. (New) The article of Claim 62, wherein said storage medium further includes instructions that, if executed, further result in counting the number of packets transmitted by the test packet generator.

64. (New) The article of Claim 60, wherein transmitting from the test packet generator comprises communicating data onto a parallel bus.

65. (New) The article of Claim 60, wherein said storage medium further includes instructions that, if executed, further result in programming content of the first packet header and the second packet header by executing software to write to at least two sets of packet header registers.

66. (New) The article of Claim 65, wherein said storage medium further includes instructions that, if executed, further result in programming the content of the first payload and the second payload by executing software to set one or more bits in at least two payload pattern registers.

67. (New) The article of Claim 66, wherein said storage medium further includes instructions that, if executed, further result in determining the size of the first packet and the second packet by executing software to write packet size control information into at least two packet size control registers.